

1652

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/218,913B

DATE: 04/18/2001
 TIME: 10:40:11

Input Set : A:\txt.98,736.Seq.Lst.2nd.Rev.txt
 Output Set: N:\CRF3\04182001\I218913B.raw

3 <110> APPLICANT: Hall, Roderick L
 4 Poll, Christopher T.
 5 Newton, Benjamin B.
 6 Taylor, William J.A.
 8 <120> TITLE OF INVENTION: A Method for Accelerating the Rate of Mucociliary Clearance
 W--> 9 <130> FILE REFERENCE: 98,736
 11 <140> CURRENT APPLICATION NUMBER: 09/218,913B
 12 <141> CURRENT FILING DATE: 1998-12-22
 14 <160> NUMBER OF SEQ ID NOS: 71
 16 <170> SOFTWARE: Microsoft Word 97
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 179
 20 <212> TYPE: PRT
 21 <213> ORGANISM: Homo sapien
 23 <400> SEQUENCE: 1
 24 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 25 1 5 10 15
 27 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 28 20 25 30
 30 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 31 35 40 45
 33 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 34 50 55 60
 36 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 37 65 70 75 80
 39 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 40 85 90 95
 42 Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 43 100 105 110
 45 Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 46 115 120 125
 48 Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 49 130 135 140
 51 Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
 52 145 150 155 160
 54 Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
 55 165 170 175
 57 Ala Val Ser
 60 <210> SEQ ID NO: 2
 61 <211> LENGTH: 197
 62 <212> TYPE: PRT
 63 <213> ORGANISM: Homo sapien
 65 <220> FEATURE:
 66 <221> NAME/KEY: sig_peptide
 67 <222> LOCATION: 1..18
 69 <400> SEQUENCE: 2
 70 Ala Gly Ser Phe Leu Ala Trp Leu Gly Ser Leu Leu Ser Gly Val

ENTERED

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71 1 5 10 15
 73 Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
 74 20 25 30
 76 Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
 77 35 40 45
 79 Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
 80 50 55 60
 82 Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
 83 65 70 75 80
 85 Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
 86 85 90 95
 88 Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp
 89 100 105 110
 91 His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala
 92 115 120 125
 94 Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val
 95 130 135 140
 97 Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn
 98 145 150 155 160
 100 Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg
 101 165 170 175
 103 Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu
 104 180 185 190
 106 Ala Gly Ala Val Ser
 107 195
 109 <210> SEQ ID NO: 3
 110 <211> LENGTH: 153
 111 <212> TYPE: PRT
 112 <213> ORGANISM: Homo sapien
 114 <400> SEQUENCE: 3
 115 Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala
 116 1 5 10 15
 118 Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu
 119 20 25 30
 121 Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys
 122 35 40 45
 124 Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly
 125 50 55 60
 127 Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala
 128 65 70 75 80
 130 Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr
 131 85 90 95
 133 Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser
 134 100 105 110
 136 Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe
 137 115 120 125
 139 Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu
 140 130 135 140
 142 Ala Cys Met Leu Arg Cys Phe Arg Gln

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Input Set : A:\txt.98,736.Seq.Lst.2nd.Rev.txt
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143 145 150
145 <210> SEQ ID NO: 4
146 <211> LENGTH: 58
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapien
150 <400> SEQUENCE: 4
151 Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala
152 1 5 10 15
154 Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu
155 20 25 30
157 Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys
158 35 40 45
160 Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
161 50 55
163 <210> SEQ ID NO: 5
164 <211> LENGTH: 51
165 <212> TYPE: PRT
166 <213> ORGANISM: Homo sapien
168 <400> SEQUENCE: 5
169 Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg
170 1 5 10 15
172 Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly
173 20 25 30
175 Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu
176 35 40 45
178 Lys Lys Cys
179 50
181 <210> SEQ ID NO: 6
182 <211> LENGTH: 58
183 <212> TYPE: PRT
184 <213> ORGANISM: Homo sapien
186 <400> SEQUENCE: 6
187 Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
188 1 5 10 15
190 Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
191 20 25 30
193 Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
194 35 40 45
196 Glu Ala Cys Met Leu Arg Cys Phe Arg Gln
197 50 55
199 <210> SEQ ID NO: 7
200 <211> LENGTH: 51
201 <212> TYPE: PRT
202 <213> ORGANISM: Homo sapien
204 <400> SEQUENCE: 7
205 Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg
206 1 5 10 15
208 Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly
209 20 25 30

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211 Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met
 212 35 40 45
 214 Leu Arg Cys
 215 50
 217 <210> SEQ ID NO: 8
 218 <211> LENGTH: 92
 219 <212> TYPE: PRT
 220 <213> ORGANISM: Homo sapien
 222 <400> SEQUENCE: 8
 223 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 224 1 5 10 15
 226 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 227 20 25 30
 229 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 230 35 40 45
 232 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 233 50 55 60
 235 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 236 65 70 75 80
 238 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser
 239 85 90
 241 <210> SEQ ID NO: 9
 242 <211> LENGTH: 708
 243 <212> TYPE: DNA
 244 <213> ORGANISM: Homo sapien
 246 <220> FEATURE:
 247 <221> NAME/KEY: misc_feature
 248 <222> LOCATION: 679..708
 249 <223> OTHER INFORMATION: /note= "n at positions 622, 679, 707 is any nucleic acid"
 251 <400> SEQUENCE: 9
 252 ggccgggtcgttctcgccctggctgggatcgtgtccctctgtgggtccggccgatgcggggc 60
 254 ccgagaacgcgcgcatccacgacttctgcctgggtcgaaatgtggatccgtccagctgtttgttatgg 120
 256 ctccatgcctagggtgttggatccatgtcacatgtggatccgtccagctgtttgttatgg 180
 258 gggctgtgacggaaacagcaataattacgttggatccatgtggatccgtccagctgtttgttatgg 240
 260 cactgtcaca gagaatgcca cgggtgacactggccaccggccaccggatgtc 300
 262 tgcccccaagtgtcccgagaa ggcaggattctggatccatgtggatccgtccagctgtttgttatgg 360
 264 tgaagaatactgcaccgcca acgcgttgcacttgcgtgcattcttgcgtccacgtctg 420
 266 gtactttgacgtggagaggaactcctgcataacttcattatggaggtgtccggggccaa 480
 268 taagaacagctaccgtctgaggaggcctgtatgtccgcgtttccggccatgtggatccgtcc 540
 270 tcctccctgtcccttgctcaaagggtgtgttgcgttgcgtccggccatgtggatccgtcc 600
 272 ttgatcccttctctggagcgtccatgttctactgttgcgtccggccatgtggatccgtcc 660
 274 aggagcgtgcctggggancgtctggatgtatgtcaagggn 708
 276 <210> SEQ ID NO: 10
 277 <211> LENGTH: 235
 278 <212> TYPE: PRT
 279 <213> ORGANISM: Homo sapien
 281 <220> FEATURE:
 282 <221> NAME/KEY: peptide
 283 <222> LOCATION: 1..235

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Input Set : A:\txt.98,736.Seq.Lst.2nd.Rev.txt
Output Set: N:\CRF3\04182001\I218913B.raw

284 <223> OTHER INFORMATION: /note= "Xaa at positions 198, 201, 226, and 233 are unknown
285 amino acids"
287 <400> SEQUENCE: 10
288 Ala Gly Ser Phe Leu Ala Trp Leu Gly Ser Leu Leu Ser Gly Val
289 1 5 10 15
291 Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
292 20 25 30
294 Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
295 35 40 45
297 Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
298 50 55 60
300 Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
301 65 70 75 80
303 Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
304 85 90 95
306 Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp
307 100 105 110
309 His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala
310 115 120 125
312 Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val
313 130 135 140
315 Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn
316 145 150 155 160
318 Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg
319 165 170 175
321 Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu
322 180 185 190
W-1> 324 Ala Gly Ala Val Ser Xaa Trp Cys Xaa Ser Phe Ser Trp Gly Ala Ser
325 195 200 205
327 Met Val Leu Leu Ile Pro Gly Gly Lys Glu Glu Pro Gly Ala Cys Pro
328 210 215 220
W--> 330 Ala Xaa Arg Leu Glu Leu Arg Arg Xaa Gln Gly
331 225 230 235
333 <210> SEQ ID NO: 11
334 <211> LENGTH: 179
335 <212> TYPE: PRT
336 <213> ORGANISM: Homo sapien
338 <220> FEATURE:
339 <221> NAME/KEY: peptide
340 <222> LOCATION: 1..170
341 <223> OTHER INFORMATION: /note= "Xaa at positions 8, 17, 19, 21-26, 40, 42, 45-47,
52, 64,
342 103, 112, 114, 116-121, 135, 137, 140-142, 147, and 159 is any
343 amino acid residue"
345 <400> SEQUENCE: 11
W--> 346 Ala Asp Arg Glu Arg Ser Ile Xaa Asp Phe Cys Leu Val Ser Lys Val
347 1 5 10 15
W--> 349 Xaa Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Trp Trp Tyr Asn Val Thr
350 20 25 30
W--> 352 Asp Gly Ser Cys Gln Leu Phe Xaa Tyr Xaa Gly Cys Xaa Xaa Ser

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

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TIME: 10:40:12

Input Set : A:\txt.98,736.Seq.Lst.2nd.Rev.txt

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L:9 M:283 W: Missing Blank Line separator, <130> field identifier
L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:427 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13
L:456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:492 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:505 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:529 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:576 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:588 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:598 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:18
L:992 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:45
L:1099 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47
L:1206 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:49